(Currently Amended) A data driven processing method, comprising: 1.

providing, by a host controller, a first set of instructions and incoming data to a first processing unit; of a data driven processor, the first processing unit to operate upon said incoming data in accordance with the first set of instructions;

configuring, by the host controller, a data path for transferring data between a second processing unit of the data driven processor and external memory, wherein the data path couples the second processing unit to the external memory through a memory access unit of the processor; and

the first processing unit, in response to recognizing that the first set of instructions will require one of reading from and writing to external memory, based on having processed the first set of instructions, provides addressing information to a memory access unit of the processor through a control port of the first processing unit to enable the transfer of additional data between the external memory and the second processing unit via said data path.